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(54) Title: ISOLATED NUCLEIC ACID MOLECULE ENCODING A NOVEL CENTROMERE-ASSOCIATED MOTOR PROTEIN, AND USES THEREOF

(57) Abstract: An isolated nucleic acid is provided which encodes a novel centromere-associated motor protein, HsCENP-E. Also provided are the purified polypeptide encoded by the nucleic acid sequence, and antibodies immunologically specific for the polypeptide. These biological molecules are useful as markers of cellular proliferation, particularly for the identification of cells in the G2 and M phases of the cell cycle. Methods are provided for using the nucleic acid, protein and antibodies for assessing cellular proliferation in biological fluids and tissue samples, and for detecting the presence of autoantibodies to the protein.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/18203

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C07H 21/04; C12N 15/00, 1/20, 5/00					
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According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols) U.S.: 536/23.1, 23.2; 435/6, 15, 320.1, 325, 252.3					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category *	Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.	
X	US 6,544,766 B1 (BERAUD et al) 08 April 2003 (08.04.2003), entire document.			1-3, 5-10, 12-17	
x	WO 02/02055 A2 (ANADYS PHARMACEUTICALS, INC.) 10 January 2002 (10.01.20002), entire document.			1-3, 5-10, 12-17	
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